

Fig. 1

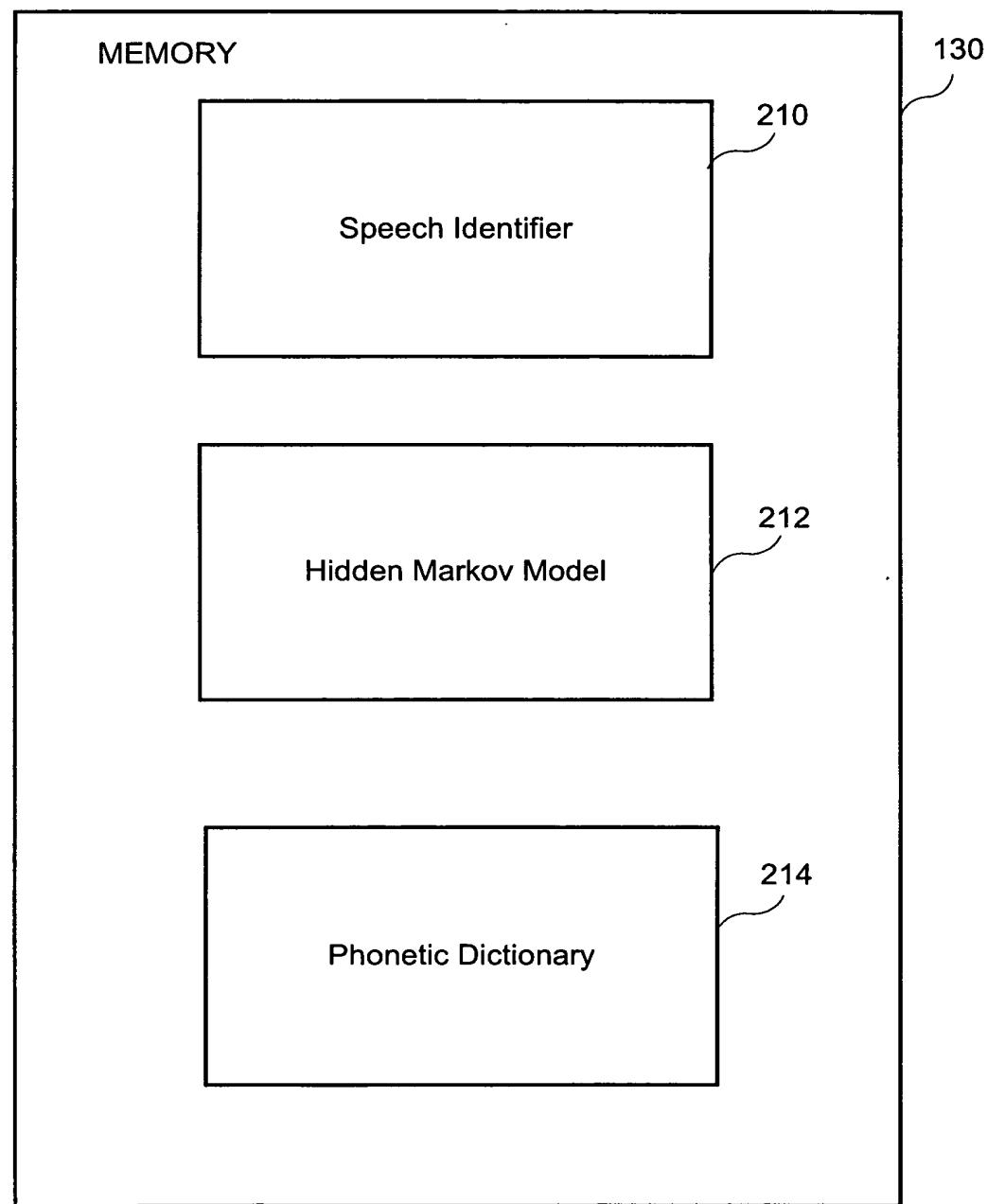


FIG. 2

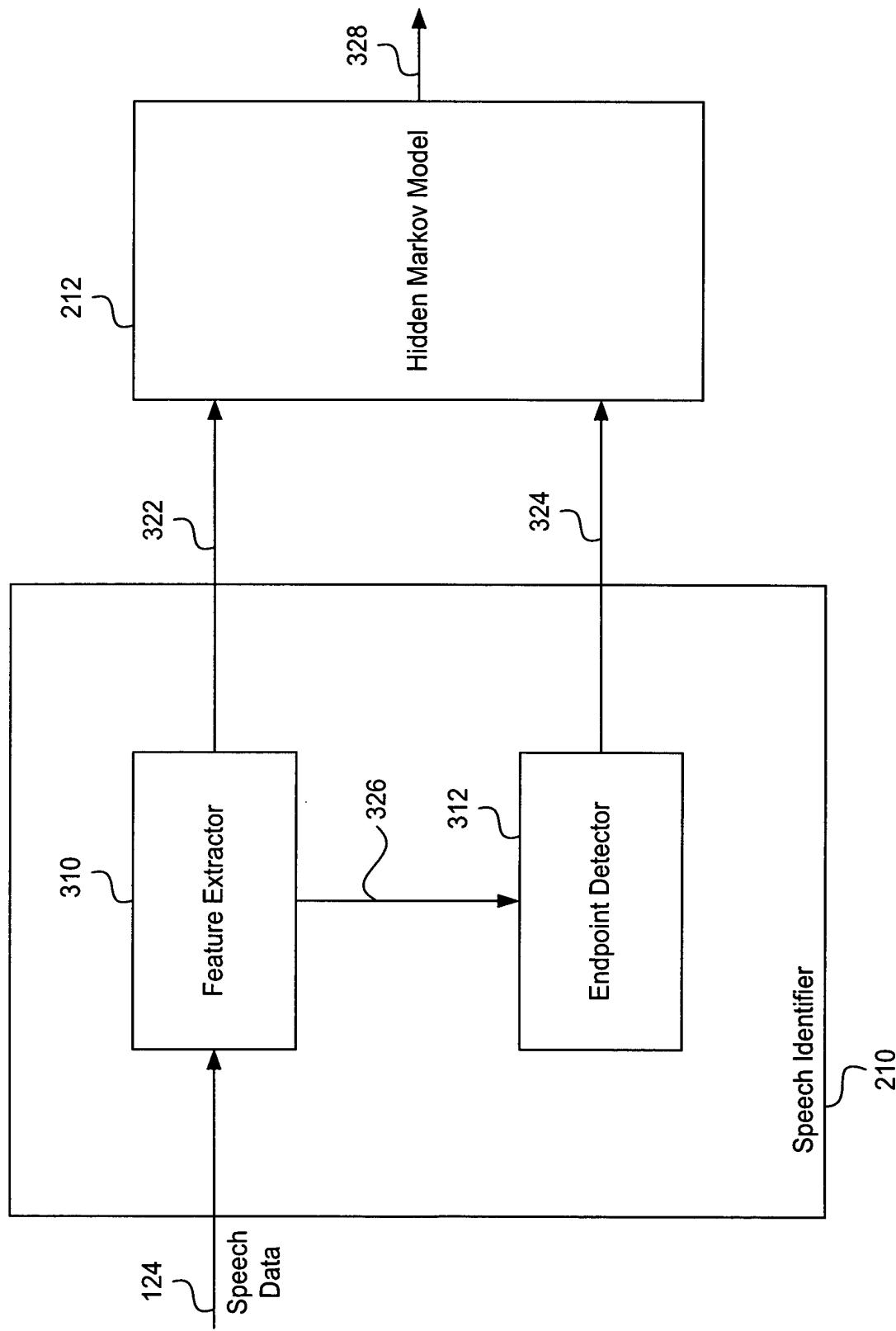


Fig. 3

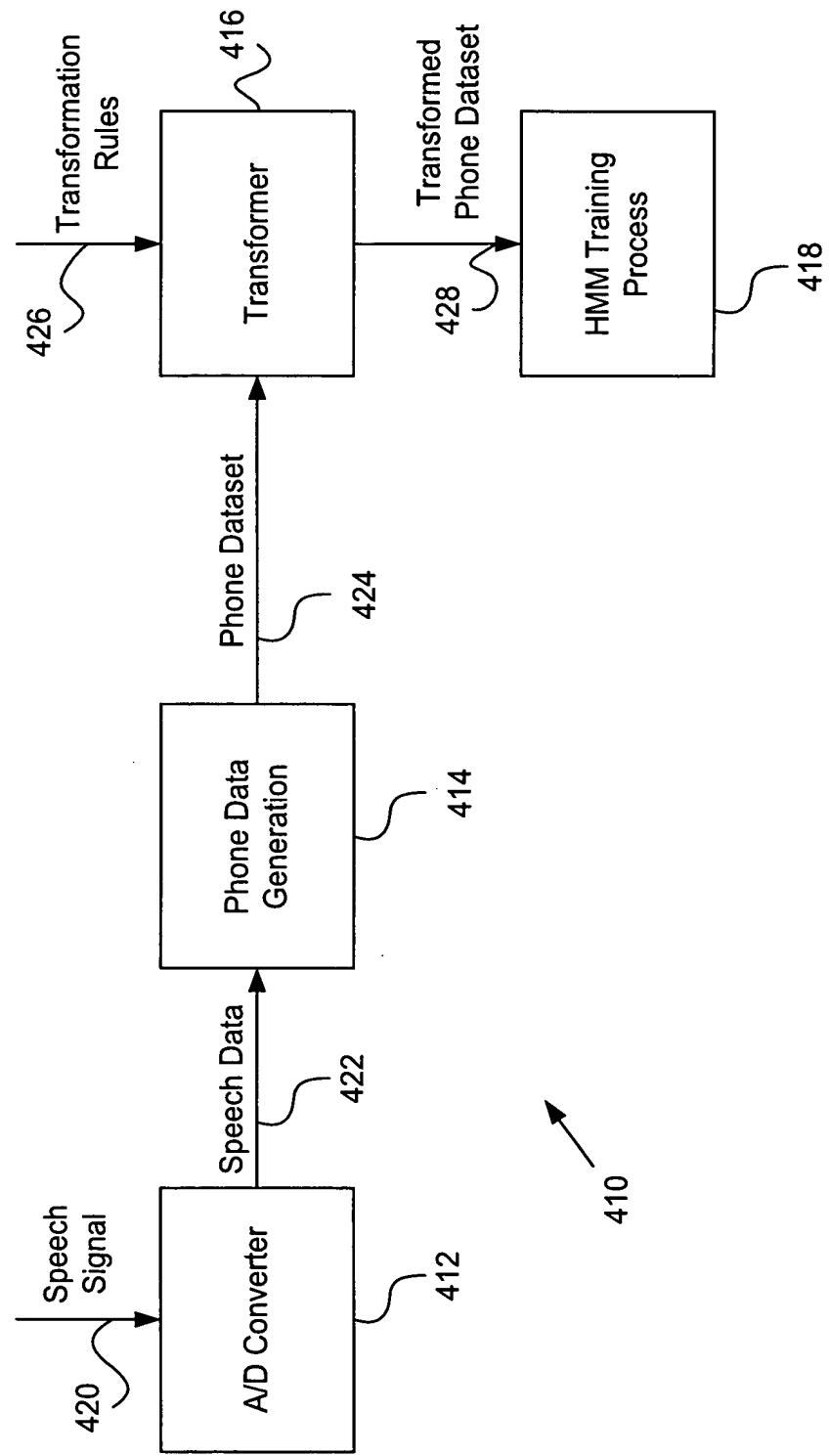


Fig. 4

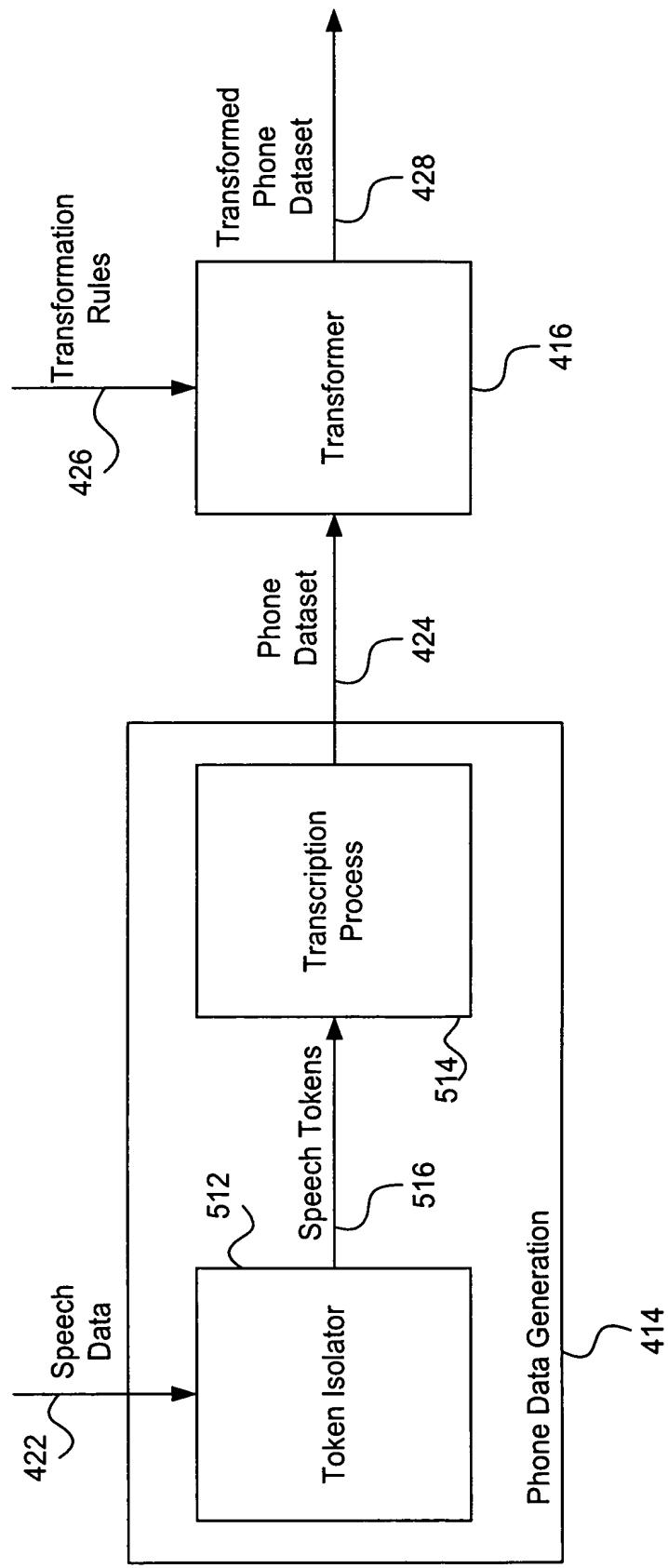


Fig. 5

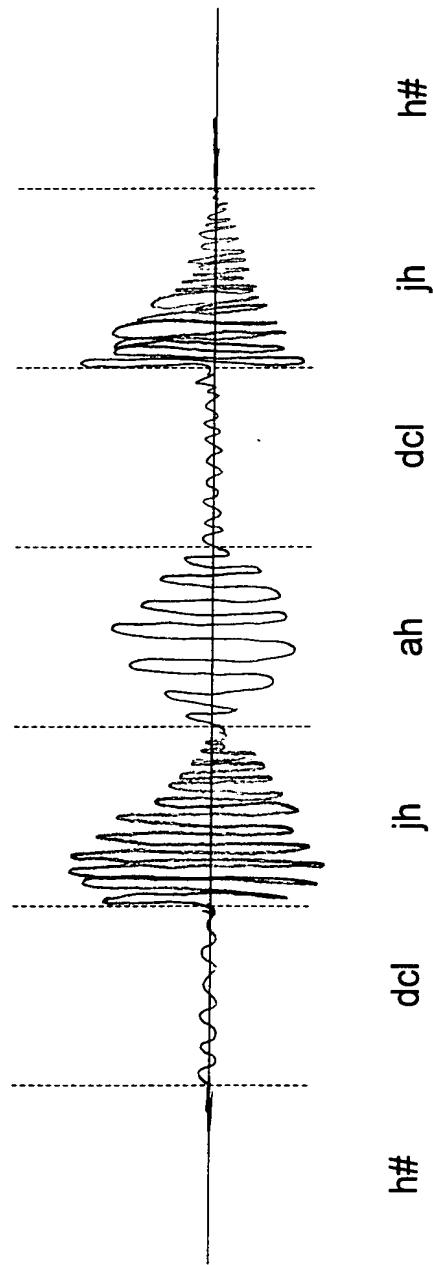


Fig. 6

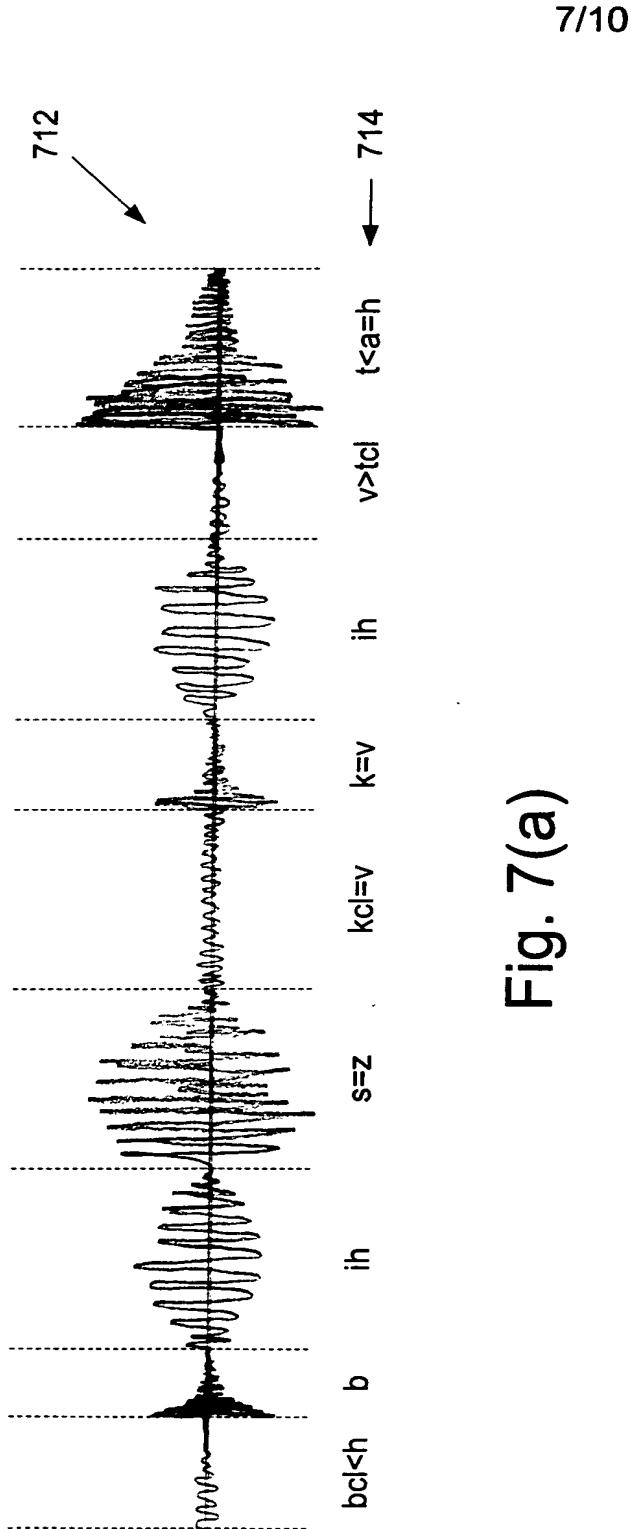


Fig. 7(a)

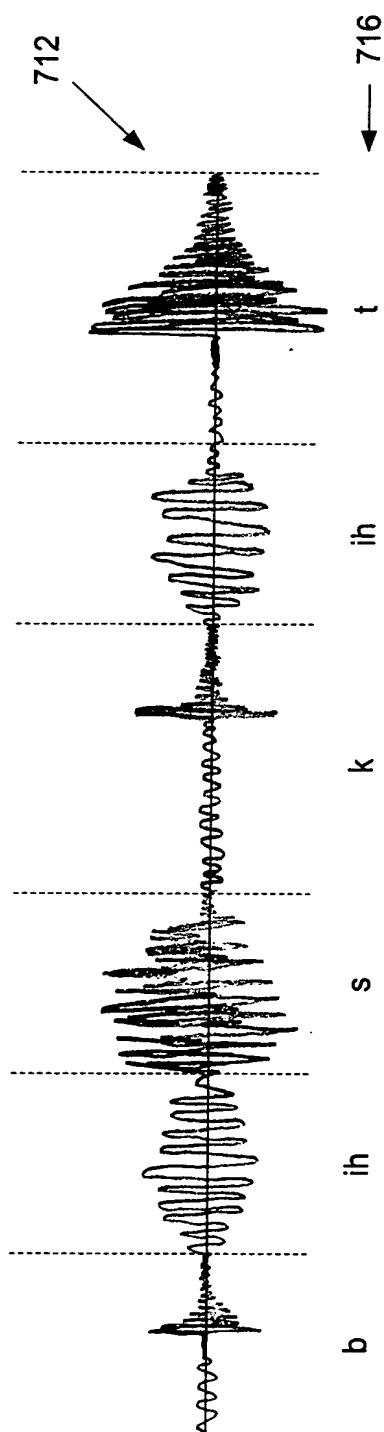


Fig. 7(b)

Category	Base Phones	
Stops and Affricates	b d g p t k dx q jh ch	
Fricatives	s sh z zh f th v dh hh hv	812
Nasals	m n ng em en eng nx	
Semivowels and Glides	l r w y	
Diphthongs and Syllabics	ey aw ay oy ow er axr el	
Vowels	iy ih eh ae aa ah ao uh uw ux ax ix ax-h	
Silence, Closure, Pause	h# epi pau bcl dcl gcl pcl tcl kcl	
Stress	1 2	
Variation of glottal stop	qq qh qcl qclq qqcl hqq hqh	
Multiple burst releases	pp tt kk bb dd gg jhjh chch	814
Closures of fricative consonants	fcl thcl scl shcl vcl dhcl zcl zhcl	
Vowel velarization/lateralization	al ol ul	
R-coloring	or ar ixr	
Glide loss	ee oo	
R-deletion	ax_ e_ ix_ ri ra	
Labio-velar fricative	hw	
Articulator noise	1# b# hh# w# g# ly# ll# lq#	

810

Fig. 8(a)

Acoustic-phonetic Process	Symbol
Nasalization	n
Glottalization variance	q qh hq qs
Breathiness	b
Labialization	w
Palatalization or whistle	y
Voicing	v
Devoicing	h
Voiced Frication	z
Voiceless Frication: low freq.	hh
Voiceless Frication: high freq.	s
Epenthetic Vowel	a
Murmur	m
Air Puff	p
Burst Quality	t
Approximation	c
No Burst/Release	u
Tongue click	x

816

Fig. 8(b)

MERGE	bcl b : b
MERGE	tcl t : t
MERGE	kcl k : k
SPLIT	em : ah m
SPLIT	or : ao r
SPLIT	al : aa l
REPLACE	gg : g
REPLACE	qclq : q
SPLIT	aa=n : aa n
REPLACE	p=v : b
CHANGE IN CONTEXT	aa=n : aa < n m ng

912

Fig. 9

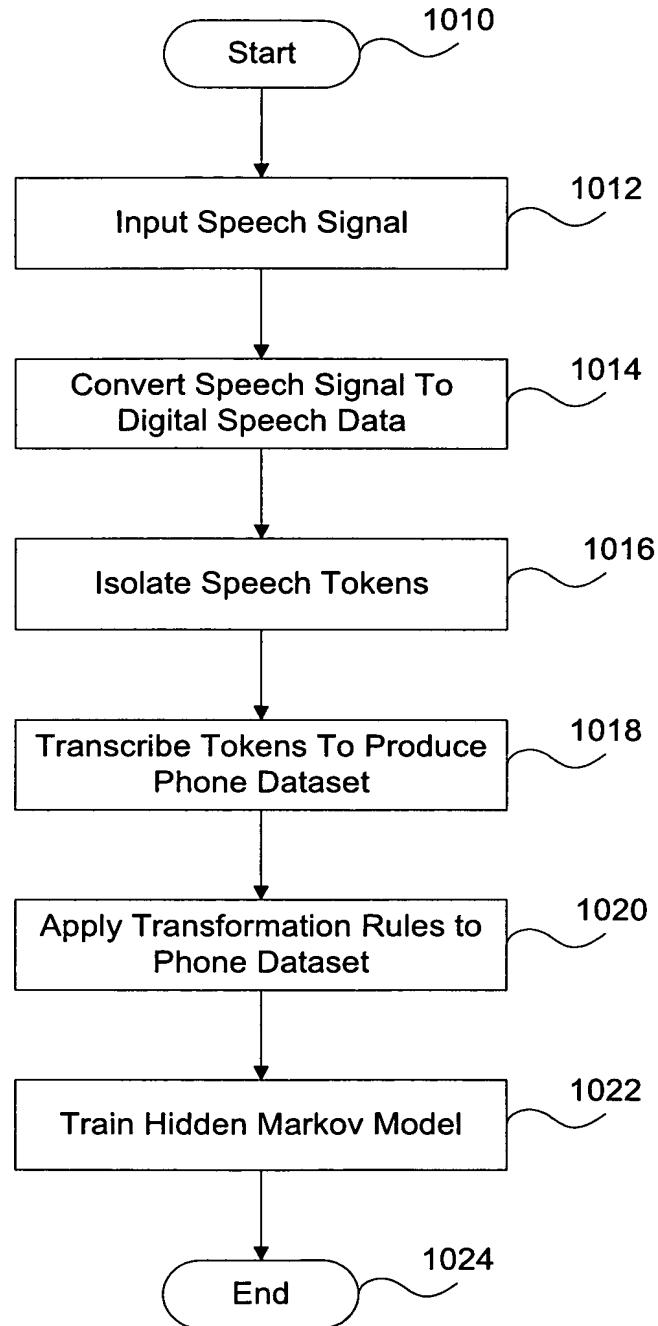


Fig. 10